

**Total Suspended Solids (TSS)****SM 2540 D – 1997 (2011)**

*ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 2020.*

Facility Name: \_\_\_\_\_ LAB ID: \_\_\_\_\_  
 Assessor Name: \_\_\_\_\_ Analyst Name: \_\_\_\_\_ Inspection Date: \_\_\_\_\_

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/Revision/Date: _____ Analyst: _____ Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
1) Are samples stored at $\leq 6^{\circ}\text{C}$ and analyzed within 7 days of collection?	40CFR136.3 Table 11				
2) Are glass fiber filters Whatman grade 934AH; Gelman type A/E, Millipore type AP40, E-D Scientific Specialties grade 161, or other product that gives demonstrably equivalent results?	2540D.2, 2540C.2.a				
3) Does sample volume yield 2.5-200 mg dried residue? If residue $< 2.5$ mg, is volume increased to 1 liter?	2540D.3.b				
4) Is sample filtration completed within 10 minutes?	2540D.3.b				
5) If complete filtration takes more than 10 minutes, is filter diameter increased or sample volume decreased.	2540D.3.b				
6) Are filters prepared by inserting wrinkled side up into the filtration apparatus, washing with three successive 20 mL portions of reagent-grade water, drying at $103-105^{\circ}\text{C}$ for one hour, and storing in a dessicator?	2540D.3.a				
7) Is the moisture content of desiccant monitored?	2540 B 2.d				
8) Are samples either stirred while pipetting or shaken well before pouring into a graduated cylinder?	2540D.3.c*				
9) After filtering samples, are filters washed with 3 successive 10 mL volumes of distilled water while vacuum is applied, allowing complete drainage between rinses?	2540D.3.c				
10) Is suction continued ~3 minutes after rinsing the filtered sample?	2540D.3.c				
11) Are filters (or gooch crucible and filter combinations) dried at least one hour at $103 - 105^{\circ}\text{C}$ , cooled in a desiccator, and weighed?	2540D.3.c				
12) Is the drying, cooling/desiccating, and weighing cycle repeated for all samples until a constant weight is obtained (weight change is less than 4% of the previous weight or 0.5 mg, whichever is less)?	2540D.3.c				
13) Are results are calculated according to the method?	2540D.4				
14) Are matrix duplicates within 5% of their average weight? ("Should"; The laboratory may use this as acceptance criteria or develop internal limits from performance data per 1020B.7)	2540D.3.c				

Notes/Comments: \*The use of graduated cylinders for TSS is approved by EPA: <http://www.epa.gov/waterscience/methods/update/questions.html#tss>